**Tennessee Department of Transportation**
**Long Range Planning Division**

# May 2016 CMAQ Project Competition
# Project Selection Criteria

**PROPOSAL DEADLINE: July 1, 2016**

The Tennessee Department of Transportation (TDOT) is requesting project proposals for funding under the federal Congestion Mitigation and Air Quality Improvement (CMAQ) program. TDOT is accepting CMAQ proposals from local government agencies, transit agencies, private sector companies and nonprofit organizations for projects that are eligible for CMAQ funding (i.e., that will benefit air quality in counties that are designated by EPA as federal air quality nonattainment or maintenance areas).

All CMAQ projects must meet certain basic requirements. Each must be (1) a transportation project that (2) reduces air emissions from mobile sources (3) in an air quality nonattainment or maintenance area. Projects located in an attainment county adjacent to a nonattainment or maintenance county may be considered for funding, but project sponsors must demonstrate to FHWA that the project will improve air quality in the adjacent nonattainment county.

Projects to reduce congestion are encouraged, but the strategy selected to reduce congestion is very important. Air quality analyses must demonstrate that the congestion reduction project will also reduce air emissions. There are specific restrictions against using CMAQ funds for some congestion reduction strategies. For example, projects that add capacity (other than HOV or HOT lanes) are not eligible for CMAQ funding. In reviewing project proposals, TDOT intends to rely on detailed project descriptions and explicit air quality analyses (i.e., emission reduction estimation methods, analysis and emission reduction estimates) provided by CMAQ grant applicants to ensure that each project is eligible for CMAQ funding. Formal authority to determine the eligibility of CMAQ projects remains with FHWA.

TDOT intends to use the following project selection criteria to select projects for funding. A review team will evaluate and score each project proposal. Each project proposal will be evaluated against the criteria listed below, and the review team will give each proposal a numerical score under each evaluation criterion. Scores will be totaled to a maximum of 100 points, and higher numerical scores will indicate higher quality proposals.

***Maximum Total Score = 100 points***

**1. Emission Reduction Estimates**
**(0–20 points)**

TDOT will assess the air quality analysis and emission reduction estimates that each project sponsor must submit along with each project proposal. This criterion is designed to reward and encourage proposals that achieve the most significant emission reductions over a specified period of time. Projects with higher emission reduction estimates will receive higher scores. This criterion is related to the cost-effectiveness criterion below, but measures the emission reduction potential of a project without subjecting it to cost considerations.

Please report separate emission reduction estimates for each eligible mobile source-related criteria pollutant. These include oxides of nitrogen (NOx), particulate matter 2.5 microns in diameter of less (PM 2.5), oxides of nitrogen, volatile organic compounds (VOCs) and carbon monoxide(CO). Estimates of carbon dioxide (CO2) emissions will not be counted or considered.

Projects that achieve higher reductions of PM 2.5 and NOx will receive higher scores. Those are the pollutants of greatest concern in Tennessee. Emission reductions of the various pollutants will be weighted to represent their relative importance to Tennessee's air quality. PM 2.5 emission estimates will be weighted by a factor of one thousand (1,000). NOx emission will be weighted by a factor of one hundred (100). VOC emissions will be weighted by a factor of ten (10). CO emissions will be weighted by a factor of one (1).

Report emission reduction estimates for the first full year of a project, and estimate the number of years that the project's emission reductions will continue. Because emission reduction estimates must often rely on analytical assumptions, reasonable and realistic assumptions will earn higher scores than assumptions that appear overstated and unrealistic. Documenting the accuracy and reasonableness of analytical methods and assumptions (e.g., indicating an official source for the emission estimation method) will strengthen a project proposal and earn higher scores.

**2. Cost-Effectiveness of Project Emission Reductions**
**(0–20 points)**

TDOT will assess and weigh the cost-effectiveness of project proposals. Cost-effectiveness is the project's cost per unit (kg/year) of emission reduction measured several different ways. The first will be a cost-effectiveness estimate for all criteria pollutants (NOx, VOCs, CO and PM 2.5) calculated based on all the emission reductions for each pollutant added together. Project applicants should use the preweighted emission reduction estimates to calculate cost-effectiveness.

Proposals that achieve better cost-effectiveness will receive higher scores. More cost-effective proposals will be those that achieve a unit of emission reduction at a lower cost (i.e., a lower cost per kilogram of emission reduction) than competing projects. The estimated cost-effectiveness and expected duration of air quality benefits that are claimed must be addressed explicitly in the required project air quality analysis. Proposals

that overstate the duration of air quality benefits based on unrealistic assumptions will receive lower scores. This criterion is designed to reward and encourage projects that will produce a given amount of emission reduction for the lowest cost.

The second and third cost-effectiveness calculations will apply to (a) PM 2.5 emissions only and (b) oxides of nitrogen (NOx) emissions only. Project applicants will estimate PM 2.5 and NOx reductions and then estimate the cost-effectiveness of the project at reducing PM 2.5 emissions only and then NOx emissions only. Each proposal should contain three cost-effectiveness estimates.

- Cost per kilogram of emission reduction for all criteria pollutants (CMAQ dollars requested divided by total emission reductions)
- Cost per kilogram of PM 2.5 emission reductions (CMAQ dollars requested divided by PM 2.5 emission reductions)
- Cost per kilogram of NOx emission reductions (CMAQ dollars requested divided by NOx emission reductions)

**3. Quality of Emission Reduction Estimation Methodology and Analysis**
**(0-20 points)**

The score for your proposal under this criterion will be based on a clear description of the methodology and analysis used to estimate the emission reductions that the project is estimated to deliver. The review team will be looking for a solid methodology and realistic assumptions in calculating emission reduction benefits. The description should clearly describe the steps in the methodology as well as how it was used to estimate the emission reductions for your proposal. In other words, describe the methodology and its application in estimating your project's emission reductions. If applicable, please describe who developed the methodology or where you obtained it.

The review team scores will be based on an assessment of the quality of the emissions analysis methodology and how realistic the analytical assumptions are in estimating the air quality benefits of the project. Unrealistic or overly optimistic assumptions about the emission reductions the project may achieve will lead to lower scores.

**4. Innovation, Regional Diversity and Complementary Projects**
**(0–10 points)**

This criterion will award points to projects that are innovative, that fill gaps in regional efforts to improve air quality and reduce congestion and that will interact with existing programs to increase their mutual effectiveness. The review team will award more points to innovative projects that find new ways to reduce mobile source emissions, or that address new or evolving air quality/transportation issues that are now receiving more policy attention. For example, projects that reduce air emissions from freight hauling and freight transfer activities may receive higher scores.

The review team will also award more points to projects that initiate new and complementary efforts in a region, and that add a new program capability or enhance an existing one that a region wants to establish or

maintain as part of their regional suite of programs. TDOT would like to encourage regions to develop and implement a range of air quality projects that will reduce mobile source emissions in their respective areas. Each project proposal should describe how the project will relate to existing programs and capabilities in the MPO/TPO region, and how the proposed project will expand, extend or enhance regional efforts. Opportunities for achieving greater results through project coordination should be identified and described.

**5. Regional Priorities**
**(0–10 points)**
The MPOs and TPOs in the six nonattainment/maintenance regions in Tennessee will be offered an opportunity to review proposals from their respective regions and provide TDOT with their recommendations on the CMAQ proposals that have the greatest priority. The MPO/TPO Executive Boards will make the final call on the organization's priorities, after receiving feedback from the Technical Committee of each MPO/TPO. Based on their recommendations, each project will be assigned a score on whether the project was identified as a priority by the relevant MPO/TPO.

**6. Project Delivery Plan (Project Readiness, Schedule, Milestones, Major Tasks) and Management Plan**
**(0–20 points)**
TDOT will consider the quality and thoughtfulness of the proposal's implementation plan and management plan for the proposed project. Elements that will be considered include project readiness, project schedule, the description of tasks and activities that must be completed and the milestones that must be achieved for the project to be successfully implemented. TDOT will also consider the plan for managing and tracking the project to ensure that the project will be implemented successfully and on schedule. Projects that appear as if they can be more easily implemented, and that appear more likely to be completed on schedule will receive higher scores. Project readiness means that the project is ready to go and that preliminary tasks and planning have already been completed. Matching funds are available and already dedicated to the proposed project. This criterion will benefit projects that can be implemented quickly and efficiently without major complications or delays.

TDOT will also consider the description of the project sponsor's track record in successfully implementing CMAQ projects in the past. This will not penalize sponsors that have little or no experience with the CMAQ program, but it will benefit those projects sponsors that have implemented projects on schedule and within the budget in the past. Proposals should describe the project sponsor's previous experience in successfully managing CMAQ projects so that they are completed on time and within budget. Include details on specific projects to demonstrate that the projects were implemented and completed on schedule, and that expenditures were managed so as to complete the project with available funds and without incurring cost overruns.

The narrative for this criterion should be detailed and include the relevant information necessary to evaluate how likely it will be that the project will be completed successfully and without significant delays. A failure to provide this detail will likely result in a lower score.